

REMARKS

Claims 1-16 are pending. Claims 1, 5, 10, 12 and 13 are amended. No new matter is added. Reconsideration based on the foregoing amendments and the following remarks is respectfully requested.

On page 2 of the Office Action, claims 13-16 are objected to as being dependent upon a rejected base claim but indicated as allowable if rewritten in independent form including all the features of the base claim and any intervening claims. Applicant appreciates this indication of allowability but submits that at least claims 1 and 12, the independent claims from which the indicated allowable claims depend, are allowable in their own right for at least the reasons discussed below.

On page 3 of the Office Action, claims 1 and 4-7 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,631,985 to Koizumi et al. (Koizumi) in view of U.S. Patent No. 6,019,046 to Rodi. This rejection is respectfully traversed.

Claim 1 recites a printing device, comprising a platen having a supporting face for supporting fabric or a printing medium, the platen moving in an intended direction; a screen plate used during screen printing fitting detachably onto the support face in a state where the printing medium is sandwiched between the screen plate and the supporting face of the platen; and an ink-jet head for performing ink-jet printing onto the printing medium that has been subjected to screen-printing using the screen plate, in a state where the printing medium is supported on the supporting face of the platen.

Koizumi deals solely with ink-jet printing. The object to be printed upon, a piece of cloth, is subjected to preconditioning in a prescribed area. The preconditioning comprises applying a preconditioning agent to the material either by spraying or by a sponge process (col. 4, lines 34-57). The material is then applied to a printing tray 11 in some manner, the first embodiment using adhesive 15, whereby the material is moved through a printing

apparatus 31. Subsequent to printing, the printed material is removed from the printing tray 11 and placed on a sponge-like surface 54 of a color developing machine 51 for fixing (col. 10, lines 10-35). After fixing the ink, the printed material is then moved to a cleaning device where it is subjected to a shower and then hot air drying (col. 10, lines 36-59). Thus, Koizumi teaches a complicated multi-step printing operation on a piece of material.

Koizumi mentions screen-printing in the Background section, the portion to which the Office Action refers, *i.e.*, col. 1, lines 24 and 25. This mention of screen-printing in Koizumi regards one method for printing images that Koizumi indicates is disclosed in the prior art. Koizumi catalogs, in fact, other conventional methods, at col. 1, line 14 - col. 2, line 5, with their attendant shortfalls. The ink-jet textile printing system apparatus and method of Koizumi are intended to overcome enumerated shortfalls in each of the disclosed prior art methods by providing a "compact, inexpensive ink-jet textile printing system which can easily perform textile printing on a cloth product such as a T-shirt on demand" (col. 2, lines 8-10). Despite the attempts of the Office Action to combine differing methodologies disclosed in Koizumi to render obvious the subject matter of the pending claims, it is not reasonable, given the teachings of Koizumi regarding, for example, the shortfalls in screen-printing overcome by the ink-jet printing method disclosed in Koizumi, that one of ordinary skill in the art would have combined even these disclosures of Koizumi in the manner suggested with any other system such as, for example, that disclosed in Rodi. For this reason alone, the assertions of the Office Action regarding any combination of features selectively chosen from screen-printing and ink-jet printing methods discussed in Koizumi is unreasonable.

Rodi teaches an apparatus with replaceable operating mechanisms as part of a printing press 1 (Abstract). Shown in block diagram form, Rodi, at Figs. 1-3, teaches printing on a piece of paper on either one side or the other. Rodi discloses printing on the piece of paper using one of five printing units, which are a one-color ink-jet printing unit, multi-color ink-jet

printing unit, electrophotographic printing unit, offset printing unit, and a gravure printing unit. Various operating devices, such as a turning unit, a perforating unit, or a transfer port unit, can be placed on the printing press in lieu of, or in place of the printing units (col. 4, line 9 - col. 5, line 13). As such, Rodi, to any extent that it may even be combinable with Koizumi, a conclusion that Applicant does not concede, does not overcome the above-identified shortfalls in the application of Koizumi to the subject matter of the pending claims.

Further, neither Koizumi or Rodi, either alone or in combination, disclose a platen having a supporting face for supporting fabric as a printing medium, the platen moving in an intended direction. The prior art references also do not suggest mounting fabric on the single moving platen to accomplish both screen and ink-jet printing, as recited in claim 1.

Regarding combining Koizumi and Rodi, it is not at all clear how one would combine these two apparatuses. Koizumi discloses a complicated multi-step multi-operation, multi-device printing technique for ink-jet printing on a piece of cloth. Rodi addresses assembling a device using various techniques for printing on a substrate, which is described as paper sheets. The printing methods that Rodi describes, particularly electrophotographic, offset, and gravure printing are normally used with printing on paper or paper sheets. In fact, to combine the two devices in the manner suggested would render one or the other inoperative for its intended purpose.

For at least the reasons indicated above, the applied combination of prior art references would not have been suggested the combination of all of the features recited in at least independent claim 1. Further, these references cannot reasonably be considered to have suggested the subject matter of claims 4-6, which all deal with the screen plate used in screen printing. Claim 7 is allowable for its dependence on claim 1 and for the additional feature recited, as there is nothing in Rodi to suggest it is capable of application to a fabric.

Accordingly, reconsideration and withdrawal of the rejection of claims 1 and 4-7 under 35 U.S.C. §103(a) as being unpatentable over Koizumi in view of Rodi are respectfully requested.

On page 5, the Office Action rejects claims 10 and 11 under 35 U.S.C. §102(b) as being anticipated by Koizumi. This rejection is respectfully traversed.

Claim 10 calls for a printing method comprising mounting a printing medium onto a platen; placing a screen plate over the printing medium; screen printing onto the printing medium using the screen plate; and ink-jet printing by emitting ink of a darker color than the ink used in the screen printing step, onto the screen printed region, from an ink-jet head with the printing medium on the platen.

As discussed above, Koizumi only mounts the printing material on a printing tray 11 after a preconditioner has been applied to the print medium. Whereas Applicant's invention calls for screen printing with the printing medium mounted onto a platen followed by ink-jet printing with the printing medium remaining on the platen. Applicant's claims recite two printing steps, whereas in Koizumi, there is a preconditioning step followed by a printing step further followed, as discussed above, with a number of additional steps in order to fix and clear or clean the article of the preconditioning material. Further, Koizumi does not disclose accomplishing both screen printing and inkjet printing, much less while the fabric is continuously mounted on a movable platen as discussed above.

For at least the above reasons, Koizumi cannot reasonably be considered to teach, or to have suggested, the subject matter recited in at least independent claim 10. Further, claim 11, which depends directly from claim 10, is also not taught, nor can it reasonably be considered to have been suggested, by Koizumi for at least the dependence of this claim on claim 10, as well as for the separately patentable subject matter that claim 11 recites.

Accordingly, reconsideration and withdrawal of the rejection of claims 10 and 11 under 35 U.S.C. §102(b) as being anticipated by Koizumi are respectfully requested.

On page 5, the Office Action rejects claims 2, 3, 8 and 9 under 35 U.S.C. §103(a) as being unpatentable over Koizumi in view of Rodi, and further in view of U.S. Patent Publication No. 2002/0122208 to Siegeritz. The rejection is respectfully traversed.

Siegeritz is directed to a method of determining a printing color profile, and does not overcome any of the deficiencies of the basic combination of Koizumi and Rodi as applied to claim 1. As such, this combination of applied references cannot reasonably be considered to have suggested the combinations of all of the features positively recited in claims 2, 3, 8 and 9 for at least their respective dependence on independent claim 1, as well as for the separately patentable subject matter that each of these claims recites.

Accordingly, reconsideration and withdrawal of the rejection of claims 2, 3, 8 and 9 under 35 U.S.C. §103(a) as being anticipated by Koizumi in view of Rodi and further in view of Siegeritz are respectfully requested.

On page 6, the Office Action rejects claim 12 under 35 U.S.C. §103(a) as being unpatentable over Koizumi in view of Rodi and further in view of U.S. Patent No. 4,938,130 to Thorpe. This rejection is respectfully traversed.

Claim 12 recites a printing device comprising a platen having a supporting face for supporting fabric as a printing medium, the platen moving in an intended direction; a screen plate used during screen printing fitting said supporting face in a state where the printing medium is sandwiched between the screen plate and the supporting face of the platen; an ink-jet head for performing ink-jet printing onto the printing medium, that has been subjected to screen-printing using the screen plate, in a state where the printing medium is supported on the supporting face of the platen, and a frame, wherein the screen plate together with a frame, have a lock-and-key relationship with a platen.

As discussed above, the basic combination of Koizumi and Rodi cannot be combined in the manner suggested to render obvious a printing device having both a screen printing and an ink jet printing capability. Thorpe only addresses a screen printing registration device and registration method. As neither Koizumi nor Rodi address screen printing onto the printing medium, and Koizumi specifically discloses a methodology for placing an ink-jet image in the partial pre-process portion, that is the range coated with a preconditioning agent using a display screen after the printing object has been manually positioned on the printing tray 11 (Fig. 9; col. 9, lines 25-55 of Koizumi), there is no need to add the registration device or registration method of Thorpe.

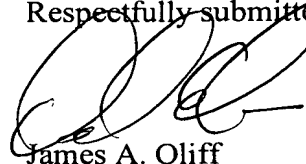
For at least the above reasons, any permissible combination of Koizumi, Rodi and Thorpe cannot reasonably be considered to have suggested the combination of all of the features positively recited in claim 12.

Accordingly, reconsideration and withdrawal of the rejection of claim 12 under 35 U.S.C. §103(a) as being unpatentable over Koizumi, Rodi and Thorpe are respectfully requested.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-12, in addition to previously indicated as allowable claims 13-16, are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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